

DOCKET NO.: MS304414.1/MSFTP464US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of

Applicant: **Manuel Fahndrich, et al.**  
Serial No.: **10/667,542**  
Filed: **September 22, 2003**  
For: **PERSISTED SPECIFICATIONS OF METHOD PRE-AND POST CONDITIONS FOR STATIC CHECKING**  
Art Unit: **Unknown**  
Examiner: **Unknown**

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Alexandria, Virginia 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120; or (c) U.S. Patent(s) and published applications(s) since the subject application was filed after June 30, 2003.

Serial No.: \_\_\_\_\_  
Filing Date: \_\_\_\_\_

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

(a)  Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.

(b)  Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

(a)  Within 3 months of the filing date or date of entry into the National Stage.

(b)  Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063 for consideration of this Statement.

(c)  After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1)  The required certification is given below, or

(2)  Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3)  Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 50-1063.

(d)  After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

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4. Certification (if applicable)

(a)  The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b)  The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1063.

Respectfully Submitted,

By   
Jeffrey R. Sadlowski  
Reg. No. 47,914

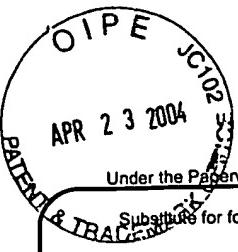
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CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Alexandria, Virginia 22313-1450.

Date: 4-21-2004

  
Jeffrey R. Sadlowski



PTO/SB/08A (08-03)

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## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(Use as many sheets as necessary)**

Sheet 1 of 2

Complete if Known	
Application Number	10/667,542
Filing Date	09/22/03
First Named Inventor	Manuel Fahndrich
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	MS304414.1/MSFTP464US

**U. S. PATENT DOCUMENTS**

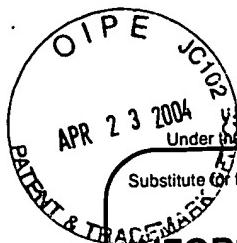
## **FOREIGN PATENT DOCUMENTS**

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**Complete if Known**

Application Number 10/667,542

Filing Date 09/22/03

First Named Inventor Manuel Fahndrich

Art Unit Unknown

Examiner Name Unknown

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(Use as many sheets as necessary)

Sheet

2

of

2

Attorney Docket Number MS304414.1/MSFTP464US

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ROBERT DELINE et al., The Fugue protocol checker: Is your software Baroque?, OOPSLA'03, 2003, pp. 1-15, Anaheim, California.	
		C. FLANAGAN et al., Extended Static Checking for Java, PLDI'02, 2002, pp.234-245, Berlin, Germany.	
		JEREMY W. NIMMER et al., Invariant Inference for Static Checking: An Empirical Evaluation, SIGSOFT 2002/FSE-10, 2002, pp. 11-20, Charleston, South Carolina.	
		MANUEL FAHNDRICH et al., Non-null types in an object-oriented language, Microsoft Research, 2002, 10 pages, Redmond, Washington.	
		KJETIL MAGE, A Practical Application of the Object Constraint Language OCL, Agder University College, 2002, 8 pages.	
		ROBERT DELINE et al., Enforcing High-Level Protocols in Low-Level Software, PLDI 2001, 2001, 11 pages, Snowbird, Utah.	
		JAKOB REHOF et al., Type-Based Flow Analysis: From Polymorphic Subtyping to CFL-Reachability, Proceedings POPL 01, 2001, 13 pages, London, England.	
		ERIK MEIJER et al., Technical Overview of the Common Language Runtime, 2000, 11 pages, Redmond, Washington.	
		ZHICHEN XU et al., Safety Checking of Machine Code, PLDI 2000, 2000, pp.70-82, Vancouver, British Columbia, Canada.	
		ALEXANDER AIKEN et al., A Toolkit for Constructing Type- and Constraint-Based Program Analyses, Proceedings of the Second International Workshop on Types in Compilation, 1998, 19 pages, Kyoto, Japan.	

Examiner Signature	Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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